Abstract of the Disclosure

Optical fiber amplifier with wide input power dynamic range is employed to make a first gain block and an optical fiber pumped by Raman pump have opposite spectral gain profiles each other, thereby obtaining flat output gain profile. The optical fiber amplifier includes: a first and a second gain blocks, wherein each gain block has a gain medium and at least one optical pump; an optical fiber disposed between the first and the second gain blocks; a Raman pump for generating a pumping light; and a coupling means for coupling the pumping light to the optical fiber.